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Welcome to the NEW Chuck E. Cheese!

This new Chuck E. Cheese figure was built with care taken in the design for reliable operation, and ease of maintenance. This figure is considered to be a fairly elaborate animated figure that contains 16 individual digital functions.

THESE FUNCTIONS ARE AS FOLLOWS:

Right Arm Swing
Left Arm Swing
Right Elbow Up
Left Elbow Up
Right Wave
Left Wave
Head Turn Right
Head Turn Left
Head Nod
Eye Blink
Eye Turn Right
Eye Turn Left
Body Forebend
Torso Twist Right
Torso Twist Left
Mouth

The following maintenance sections are intended to offer a brief outline of the systems and devices employed in this figure. Its purpose is to assist maintenance personnel in performing maintenance and/or repair as required. Being a mechanical / electrical system, items are eventually bound to deteriorate. (Wear items are deemed to be primarily: bearings, cylinders, valves, and friction points.) Other wear items include: costumes, skins, and undergarments. The wear is caused by friction, age, and simple repetitive use. A dedicated program of daily and weekly checks and maintenance practices are important to keep the figure operating and costs down. If and when a part no longer performs as desired, follow the maintenance and repair procedures specified by this manual. If there is any difficulty in doing this, feel free to contact your corporate headquarters for assistance.

FIGURE MAINTENANCE
DAILY CHECK LIST

DAILY CHECKLIST

THE FOLLOWING PROCEDURES MUST BE FOLLOWED ON A DAILY BASIS BEFORE THE FIGURES ARE TURNED ON.

1. **FILTER / REGULATOR (VALVE BOX):**
   A. Check Filter (drain water).
2. **CHECK FIGURE FOR PROPER OPERATION.**

NOTE: Always observe and follow the manufactures maintenance recommendations for servicing and repair on these items.

BEFORE ATTEMPTING ANY MAINTENANCE PROCEDURE ON THE FIGURE OR SYSTEMS, THROUGHLY READ ALL APPLICABLE INFORMATION AND PRECAUTIONS. CONSULT YOUR CORPORATE HEADQUARTERS FOR ASSISTANCE, IF NEEDED.

THROUGHLY READ THE FOLLOWING BEFORE OPERATING OR PERFORMING ANY MAINTENANCE PROCEDURE ON THE ANIMATRONIC FIGURE (S), SHOW ELEMENTS OR ANY OF THEIR OPERATIONAL SYSTEMS.

SAFETY

1. Maintenance should only be attempted by competent qualified personnel familiar with all systems and their components.
2. Never begin any maintenance procedure on a figure or show element unless the air, and/or electric is off.
3. When working near electrical or electronic systems, make sure power is off and avoid touching exposed electrical areas such as terminals and other points where voltage may be present.
4. Never replace any component with any other than an identical component. Cylinders and other components different than the original parts can cause extreme damage to the figure.
5. Observe all manufacturers recommendations for service, maintenance, and part replacement on system components.
6. Prior to operation, inspect show area figures and equipment for any obstructions, hazards, problems, etc.
7. Make sure the figure and all related systems are kept in a clean, moisture free environment for which they are intended.

2. Hissing may also mean that a hose has slipped off of a fitting or cylinder. If this should occur, find the cylinder location and you should find both ends (look for the same color hose). If the hissing is intermittent then the line is being turned on and off by the valve.

4. MECHANICAL NOISE

1. The figure contains a number of pivot points, joints, clevises and bearings. The plastic bearings and spherical rod ends, within the figure, are normally silent. Occasionally a squeak will develop. If this should occur, a single drop of 3:1 oil, at the joint itself, will solve this problem. Do not lubricate any part of the cylinder rod of any actuator, except for the rod end spherical bearings. The seals in the actuator require special factory lubrication. Petroleum based oils or greases may ruin the seals.

5. LIMB ATTACHMENT

1. If a catastrophic failure (such as a detached limb) would occur, turn the figure off immediately. This problem may be the result of a joint pin working its way out of the clevis. After maintenance, special care must be taken when reassembling the character, being careful to use the necessary locking fasteners and Locktite where required.

FIGURE MAINTENANCE – CLEANING PROCEDURE

1. FACE AND HANDS (ALL SKIN AREAS)

The figure skin is made of specially formulated elastomer that is not affected by sunlight or the elements. Dust will settle on the material to some degree and should be cleaned as required. An air hose with nozzle may be used on a regular basis (daily, if required) to dust the figure. A soft, damp makeup sponge can be used to gently wipe (not scour or rub) the dust off the facial or skin areas.

Do not use any chemicals or solvents. A feather duster will also work for removing dust from skin.

2. EYEBALL CLEANING

The eyes may be cleaned, by rubbing gently with a soft cloth / cheese cloth, dampened with warm water. After they have been cleaned, they can be lightly polished to remove streaks by using a dry swab or piece of Kleenex.

Take care not to scratch the eyes in any way.

Do not rub hard or force eyelids open or closed.

3. FUR AND COSTUME AREAS

Fur areas should be dusted using an air gun and feather duster on a regular basis. Fur fabric can be gently brushed using a soft brush.

Care must be taken to not harshly brush colored areas of fur -this may brush out color.

A damp sponge may be used, before brushing, to help remove dust or grime discoloration. Do not use solvents of any kind on fir materials. Costumes may be air blasted and/or feather dusted. Most costume material may be treated as normal clothing and can be dry cleaned as needed (do not wash).

FIGURE MAINTANANCE – Chuck E. Cheese

NOTE: TURN OFF ALL AIR AND ELECTRICAL POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. HEAD ACCESS

Remove the baseball cap. This is attached by 2 snaps, one on each side of the hat, under the brim. Chuck E's head is split around sides (behind the ears) and is attached to the front shell with pan head screws.
Upon their removal, the rear of the head can be separated from the front. This allows access into the head for repairs. Do not remove the front of the head / face from the mechanical frame. This should not be necessarv for normal maintenance.

2. COSTUME REMOVAL

The costume is split, in the back, on a central seam that allows for removal of the clothing without moving the limbs. The seams are attached with Velcro strips and must be opened carefully.

3. TORSO ACCESS

The torso mechanics can be accessed, by removing the rear half of the body shell. This is done by removing the fasteners on the clips along the seam of the shell.

4. ARM ACCESS

The arm fur is split up the back of the arm with a Velcro seam. Pull the fur out of the hand glove and split the arm all the way up. The arm fur also has an attachment point at the shoulder, using Velcro to attach it to the torso shell. The hand glove is attached with Velcro on a seam at the thumb.

5. LEG ACCESS

The leg fur is split up the back of each leg. Carefully split the fur from the bottom up. The pelvis area fur is folded over the top of the pelvis shell and Velcro'd. The fur was created to fit very tight to avoid creases and wrinkles on the characters legs. Use care and patience while re-installing the fur onto the pelvis and legs.

6. BASE ACCESS

The base is accessible by first removing the carpet covered panels under the figures feet. The valve bank is located under these panels.

ACTUATOR REPLACEMENT- Chuck E. Cheese

NOTE: TURN OFF ALL AIR AND ELECTRIC POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. ACTUATOR REPLACEMENT

ACTUATORS (CYLINDERS)

The movement of each individual function is caused by the actuator/cylinder. The actuator is constructed with only one moving part, the piston/rod assembly. As air pressure is applied to one end, the cylinder extends - moving the part in one direction. When pressure is applied to the opposite end, the cylinder retracts in the reverse direction. Air and hydraulic cylinders are constructed to last for millions of cycles. If any leakage is detected, or the cylinder fails or becomes damaged, it should be replaced.
In some cases they can be repaired, but only qualified personnel should do this.
Never replace any actuator with a different size, stroke, or manufacturer.

When changing out an actuator assembly, the most important issues are:

1. Replacing with the correct replacement actuator.
2. Replacing all components in the exact place, before they were removed.
3. Replacing hoses properly with correct color code.

2. FLOW RESTRICTORS

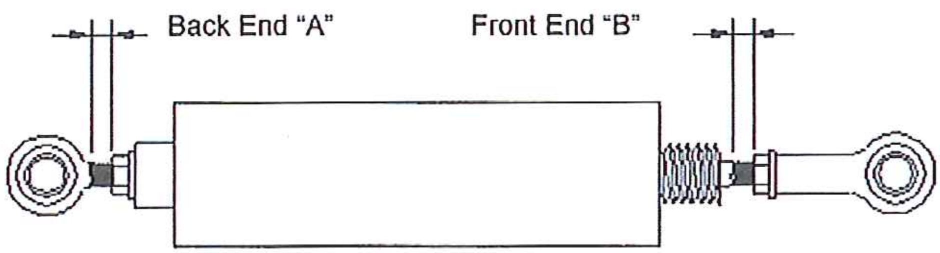
A set of colored flow control restrictors will be mounted in each line between the valve and the cylinder, one pair per function. These are usually found inside the figure a few inches from the actuator. One restrictor controls the speed that the cylinder extends, and one controls the speed that the cylinder retracts.
When replacing, it is critical that the color remains the same and the arrow on the restrictor is pointing in the direction of the actuator.
The show computer is programmed with control signals that are timed in relation to the size of the flow restrictors. If the flow restrictors are not the proper size, the timing of the figure will be incorrect, and the show will not function properly.

ACTUATOR REPLACEMENT- Chuck E. Cheese

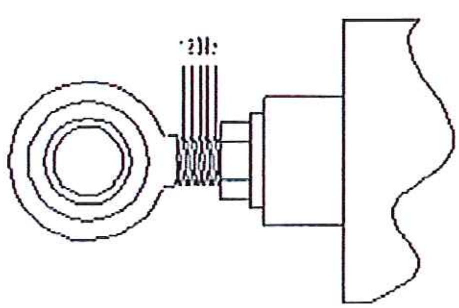
NOTE: TURN OFF ALL AIR AND ELECTRIC POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. ACTUATOR REPLACEMENT SCREW THREAD CALIBRATION

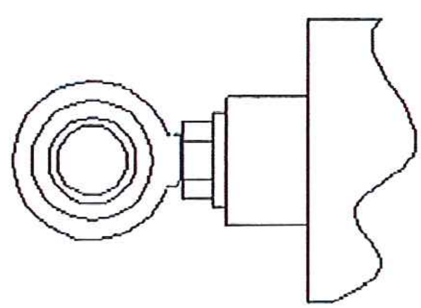
When replacing an actuator, it is important that the replacement has the same length from pivot center to center, as the one being removed. If this length is changed, it will affect the performance of the function and will possibly damage the character. Since the replacement actuator size is the same, adjustment can only be made by tightening or loosening the rod ends (at each end of the actuator).
When removing the defective actuator, count the threads on each end, as shown below and write it down. When you replace the actuator and rod ends, make sure counts are the same. Be careful as to the correct count on the proper end, either back end "A" or front end "B". These thread counts are used when originally manufacturing Chuckie. If they are observed during replacement, your figure should remain properly calibrated.



Thread Count Example #1
5 Threads Showing



Thread Count Example #2
No Threads Showing



VALVE CARD OPERATION- Chuck E. Cheese

NOTE: TURN OFF ALL AIR AND ELECTRIC POWER TO THE FIGURE BEFORE BEGINNING ANY MAINTENANCE PROCEDURE.

1. VALVE CARD

The valve bank contains valves that actuated by an electrical signal sent from Chuck E.'s control system. When opened by an electric signal, these valves release high-pressure air that travels into the hoses that lead to each individual figure movement. This fills the air cylinders, which then extend causing motion. When the electrical signal is removed - the air pressure is exhausted through the valve and the cylinder retracts back to its normal position.

2. CHUCK E.'S BASE

Chuck E.'s base (under his feet) contains a valve bank on which is mounted 16 individual electric air valves. When each valve is activated, an indicator lamp on that valve illuminates to show the presence of a control signal. Also, a button is provided on each valve that allows manual operation of each individual valve for testing purposes. (See valve diagram). High-pressure (80 PSI) air enters the valve manifolds on one end, and the exhaust exits the manifolds through tubes connected to an exhaust chamber. This chamber muffles the air noises so no "popping" is heard.

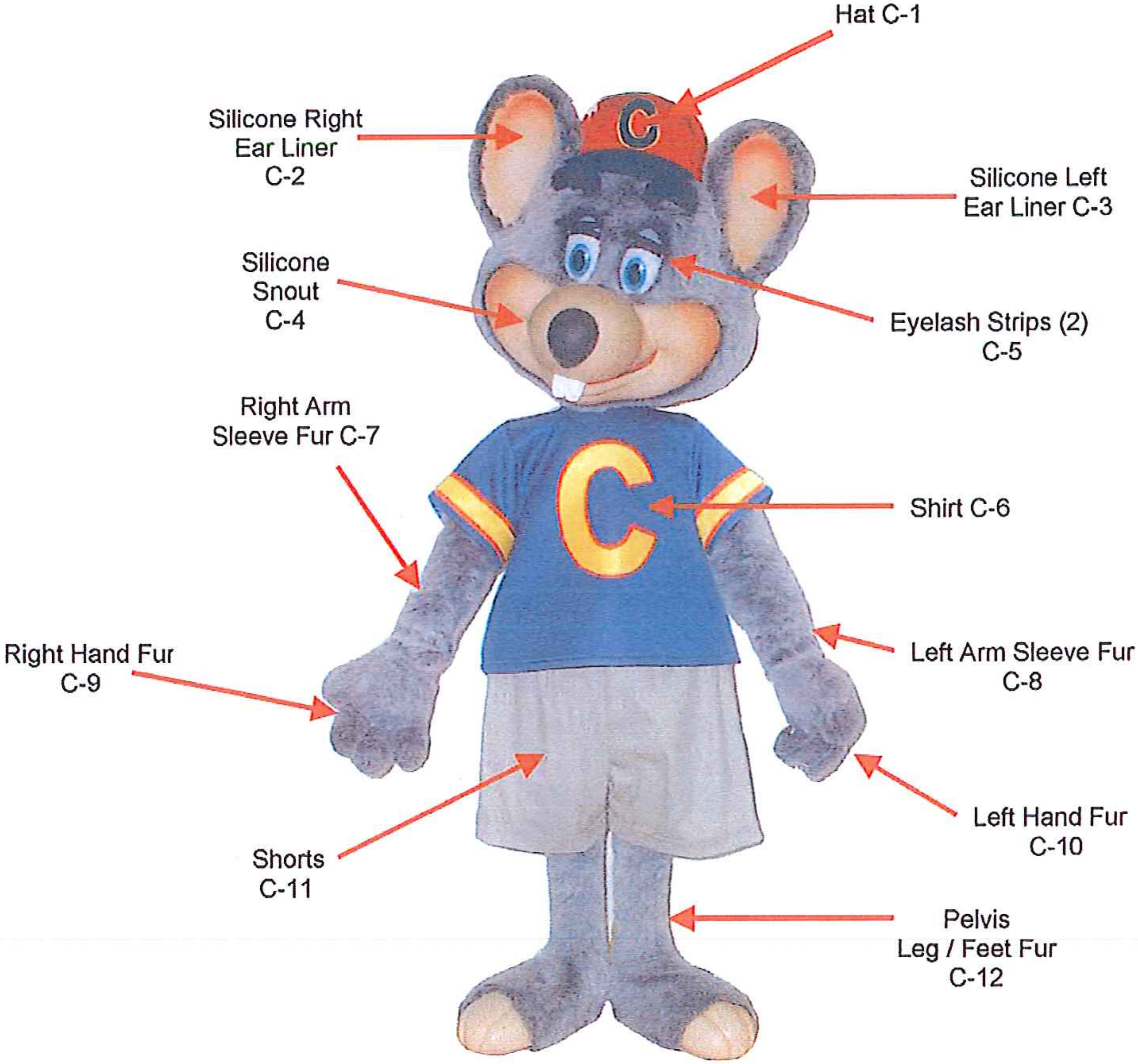
3. COMPONENT REPLACEMENT

A. Valves that become clogged or cease to operate for any reason may be unscrewed from the manifold and replaced (see valve card component sheet). Make sure that the area is clean before removal, and during replacement.
B. Take care when the valve is unscrewed that the rubber seal between it and the manifold is removed carefully and replaced in the correct orientation.
C. Be careful not to over tighten the valve screws.
D. Take care to make a good electrical connection when placing the valve pins into the terminal, and tighten the terminal screws securely.
E. Be sure that if at any time the hoses are removed from the manifold, they are replaced to the proper port they came from observing the color code.
F. After replacement, check for correct operation.

Chuck E. Cheese Function Wiring Chart

Output #	37 Pin DSub Connector Pin #	Cable Valve Card	"A" Port Hose Color	"B" Port Hose Color	"A" Orifice Color	"B" Orifice Color	Valve & Actuator #1	Function
1	1		Orange	Yellow	Blue	Blue	1	Arm swing (R)
2	2		Brown	Gray	Gray	Brown	2	Elbow up (R)
3	3		Red	Clear	Gray	Black	3	Wave (R)
4	4		Orange	Yellow	Blue	Blue	4	Arm swing (L)
5	5		Brown	Gray	Gray	Brown	5	Elbow up (L)
6	6		Red	Clear	Gray	Black	6	Wave (L)
7	7		Yellow	Orange	Blue	Blue	7	Body forward
8	8		White	Black	Gray	Gray	8	Torso twist right
9	9		Red	Clear	Gray	Gray	9	Torso twist left
10	10		Gray	Brown	Gray	Gray	10	Head turn left
11	11		Green	Blue	Gray	Gray	11	Head turn right
12	12		White	Black	Blue	Blue	12	Head up
13	13		Red	Clear	Brown	Brown	13	Mouth
14	14		Gray	Brown	Gray	Gray	14	Eye blink down
15	15		Yellow	Orange	Black	Black	15	Eye turn left
16	16		Green	Blue	Black	Black	16	Eye turn right

FIGURE / SUBJECT: Chuck E. Cheese Costume



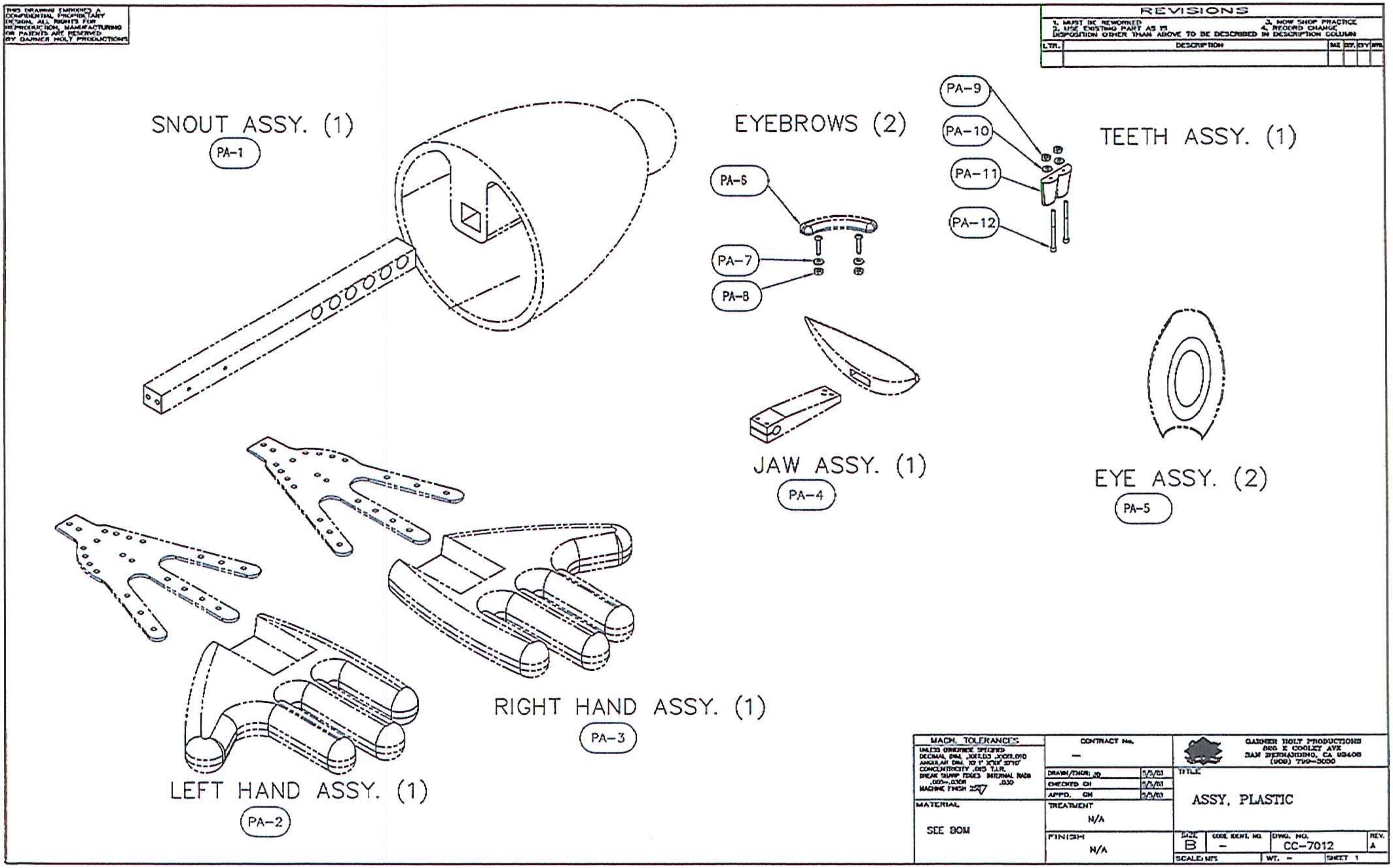
VIEW:
Chuck E. Cheese Character / Front View

CHUCK E. CHEESE COSTUME PARTS LIST

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CLIENT Chuck E. Cheese Entertainment
GATE
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PROJECT
SHOW
LOCATION

NO.	ITEM	QTY.	DESCRIPTION	PARTS #	NOTES
C-1	Hat	1		STC-0384	
C-2	Silicone Right Ear Liner	1		STC-0777	
C-3	Silicone Left Ear Liner	1		STC-0778	
C-4	Silicone Snout	1	Teeth sold separately	STC-0354	
C-5	Eyelash Strips	2		STC-0363	
C-6	Shirt	1		STC-SHIRT	
C-7	Right Arm Sleeve Fur	1	Includes leather liner	STC-0391	
C-8	Left Arm Sleeve Fur	1	Includes leather liner	STC-0392	
C-9	Right Hand Fur	1		STC-0393	
C-10	Left Hand Fur	1		STC-0394	
C-11	Shorts	1		STC-PANTS	
C-12	Pelvis - Leg/Feet Fur	1		STC-0395	

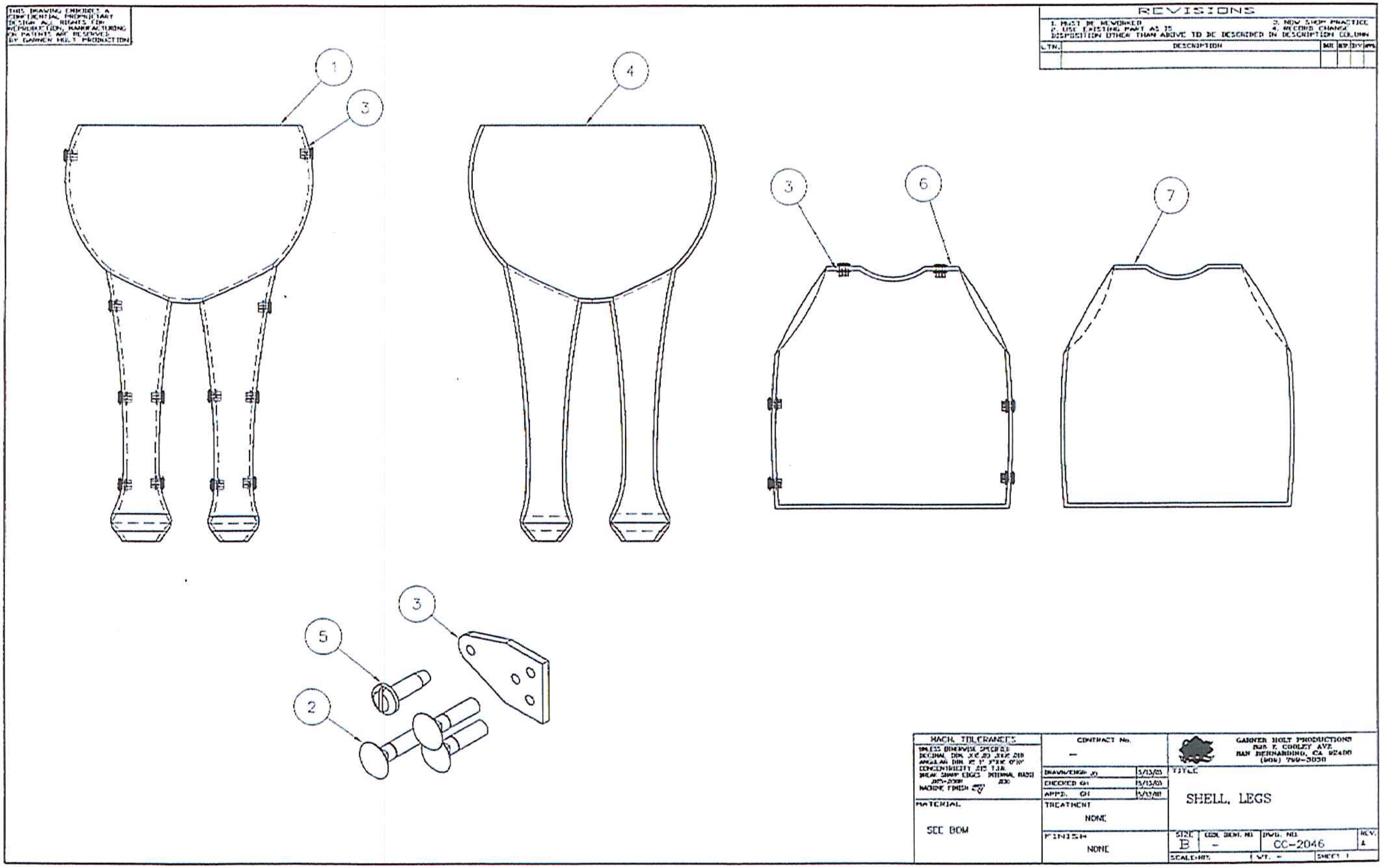

REVISIONS
1. MUST BE REWORKED
2. USE EXISTING PART AS IS
3. NOW SHOP PRACTICE
4. RECORD CHANGE
DISPOSITION OTHER THAN ABOVE TO BE DESCRIBED IN DESCRIPTION COLUMN
LTR.
DESCRIPTION
SNOUT ASSY. (1)
PA-1
EYEBROWS (2)
PA-6
PA-7
PA-8
TEETH ASSY. (1)
PA-9
PA-10
PA-11
PA-12
JAW ASSY. (1)
PA-4
EYE ASSY. (2)
PA-5
RIGHT HAND ASSY. (1)
PA-3
LEFT HAND ASSY. (1)
PA-2
MACH. TOLERANCES
MATERIAL
SEE BOM
CONTRACT No.
—
CHECKED
APPD.
TREATMENT
N/A
FINISH
N/A
GARNER HOLT PRODUCTIONS
SAN BERNARDINO, CA
TITLE
ASSY. PLASTIC
SIZE
B
DWG. NO.
CC-7012
REV.
A
SHEET 1

Garner Holt Productions	**CHUCK E. CHEESE** **PLASTIC ASSEMBLIES** **PARTS LIST**	DEPT: ANI DATE: 03/03 SEC: PAGE: 1 of 1

CLIENT Chuck E. Cheese Entertainment
GATE
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LOCATION

NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
PA-1	Snout Assembly	1		STC-0355	
PA-2	Left Hand Assembly	1		STC-0365	
PA-3	Right Hand Assembly	1		STC-0364	
PA-4	Jaw Assembly	1		STC-0779	
PA-5	Eye Assembly	1		STC-0366	
PA-6	Eyebrow Assembly	1		STC-0780	
PA-7	Washer	2	#10	STC-0775	
PA-8	Nylock Nut	2	10-32	STC-0901	
PA-9	Nylock Nut	2	6-32	STC-0895	
PA-10	Fender Washer	2	#6	STC-0642	
PA-11	Teeth	1		STC-0354	
PA-12	Socket Head Cap Screw S.S.	2	6-32 x 1 1/2"	STC-0910	


REVISIONS
1 MUST BE REWORKED
2 USE EXISTING PART AS IS
3 NEW SHOP PRACTICE
4 RECORD CHANGE
DISPOSITION OTHER THAN ABOVE TO BE DESCRIBED IN DESCRIPTION COLUMN
LTR.
DESCRIPTION
1
2
3
4
5
6
7
MACH. TOLERANCES
MATERIAL
SEE BOM
CONTRACT No.
TREATMENT
NONE
FINISH
NONE
GARNER HOLT PRODUCTIONS
TITLE
SHELL, LEGS
SIZE
B
DWG. NO.
CC-2046
REV.
A
SHEET 1

CHUCK E. CHEESE
BODY SHELLS
PARTS LIST

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CLIENT Chuck E. Cheese Entertainment
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NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
BS-1	Front Leg Shell	1		STC-0356	
BS-2	Body Shell Rivet	1		STC-0417	
BS-3	Body Shell Clip	1		STC-0408	
BS-4	Rear Leg Shell	1		STC-0356	
BS-5	Body Shell Screw	1	10-32 Pan Head	STC-0886	
BS-6	Rear Torso Shell	1		STC-0771	
BS-7	Front Torso Shell	1		STC-0771	
BS-8	Front Head Shell	1		STC-0353	
BS-9	Rear Head Shell	1		STC-0353	

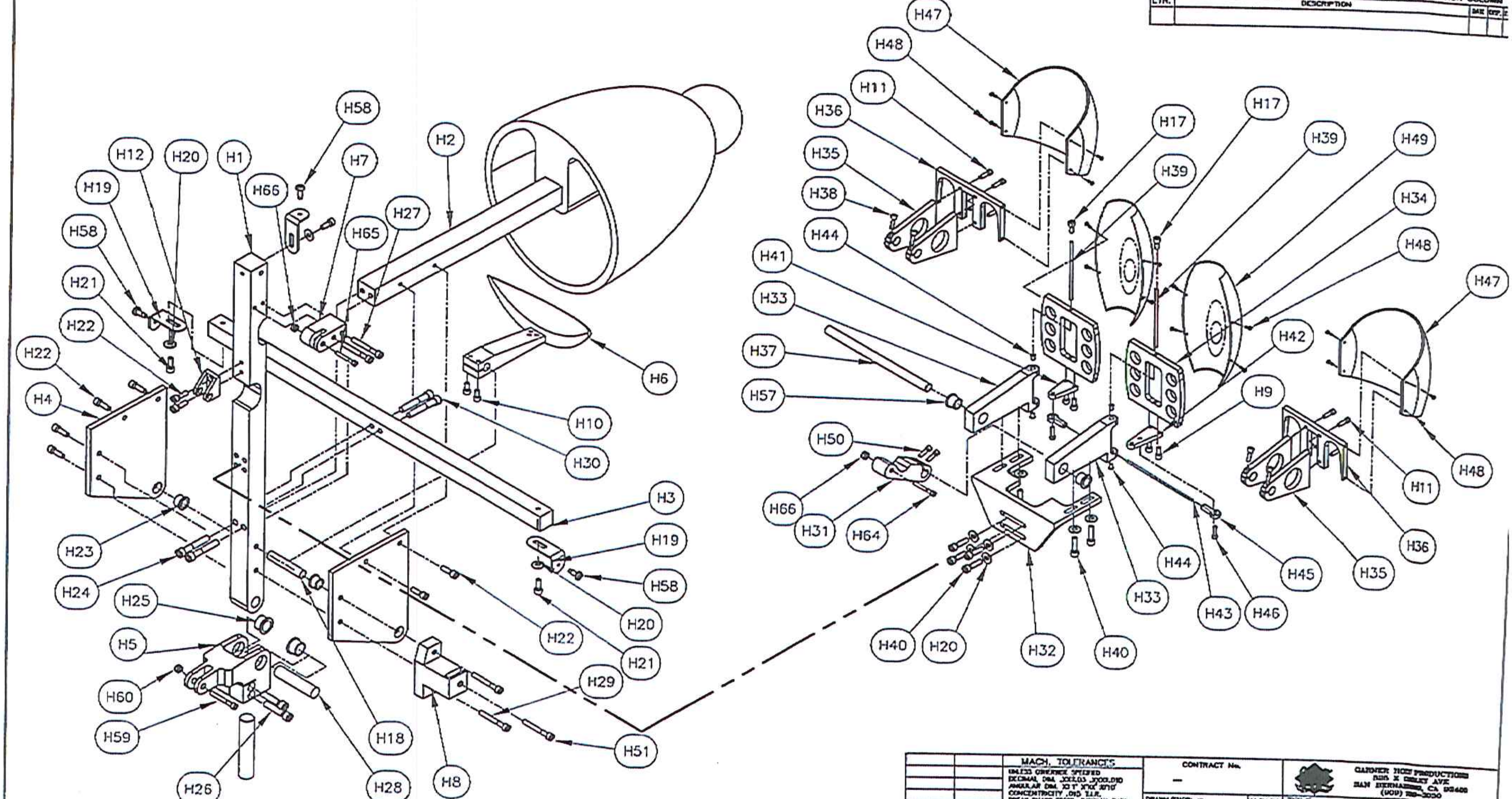
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REVISIONS

1. MUST BE REWORKED
2. USE EXISTING PART AS IS
3. NOW SHOP PRACTICE
4. RECORD CHANGE

DISPOSITION OTHER THAN ABOVE TO BE DESCRIBED IN DESCRIPTION COLUMN

LTR.	DESCRIPTION		



MACH. TOLERANCES UNLESS OTHERWISE SPECIFIED DECIMAL DIM. .XX±.03 .XXX±.010 ANGULAR DIM. X0 1° X°XX' ±0°10' CONCENTRICITY .015 T.I.R. BREAK SHARP EDGES INTERNAL RADII .005–.030R .030 MACHINE FINISH 250	CONTRACT No. —			GARNER HOLT PRODUCTIONS SAN BERNARDINO, CA
	DRAWN/ENGR. JD	11/04/03		TITLE
	CHECKED GH	11/04/03		CHUCKIE CHEESE HEAD ASSEMBLY
	APPD. GH	11/04/03		
MATERIAL ALUMINUM/SST	TREATMENT N/A			
	FINISH N/A			SIZE B · CODE IDENT. NO. — · DWG. NO. C-0023 · REV. A
				SCALE: NTS · WT. — · SHEET 1/1

PART No.	NEXT ASSY
APPLICATION	

CHUCK E. CHEESE
HEAD
PARTS LIST

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CLIENT: Chuck E. Cheese Entertainment
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NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
H-1	Head Frame Post	1		STC-0781	
H-2	Snout Frame Assy.	1		STC-0782	
H-3	Head Shell Mount Crossbar	1		STC-0783	
H-4	Jaw Pivot Side Plates	2		STC-0784	
H-5	Head Nod Clevis Block	1		STC-0785	
H-6	Lower Jaw Lever Assy.	1		STC-0786	
H-7	Eye Blink Clevis Block	1		STC-0787	
H-8	Jaw Cylinder Clevis Block	1		STC-0788	
H-9	Socket Head Cap Screw	4	8-32 x 3/8	STC-0789	
H-10	Socket Head Cap Screw	2	10-24 x 1/2	STC-0916	
H-11	Socket Head Cap Screw	8	6-32 x 5/8	STC-0911	
H-12	Upper Head Nod Clevis	1	MP 159	STC-0621	
H-13	Head Nod Cylinder	1		STC-0790	
H-14	Mouth Cylinder	1		STC-0791	
H-15	Eye Blink Cylinder	1		STC-0792	
H-16	Eye Turn Cylinder	1		STC-0793	
H-17	Socket Head Cap Screw	2	8-32 x 1/4	STC-0794	
H-18	Jaw Pivot Pin	1		STC-0795	
H-19	Head Shell Mount Angle Bracket	3		STC-0796	
H-20	Washer	11	#10	STC-0638	
H-21	Socket Head Cap Screw	3	10-24 x 3/8	STC-0915	
H-22	Socket Head Cap Screw	10	10-24 x 5/8	STC-0917	
H-23	Jaw Pivot Igus Bushing	2	PP 455	STC-0432	
H-24	Socket Head Cap Screw	2	1/4-20x1 1/2	STC-0857	
H-25	Nod Igus Bushing	2	PP 458	STC-0434	
H-26	Socket Head Cap Screw	2	1/4-20 x 1 1/4	STC-0891	
H-27	Socket Head Cap Screw	2	10-24 x 1 1/4		
H-28	Head Nod Pivot Pin	1	MP 345	STC-0797	
H-29	Socket Head Cap Screw	2	10-24 x 1"	STC-0919	
H-30	Socket Head Cap Screw	2	1/4-20 x 7/8	STC-0929	

CHUCK E. CHEESE HEAD PARTS LIST

CLIENT Chuck E. Cheese Entertainment
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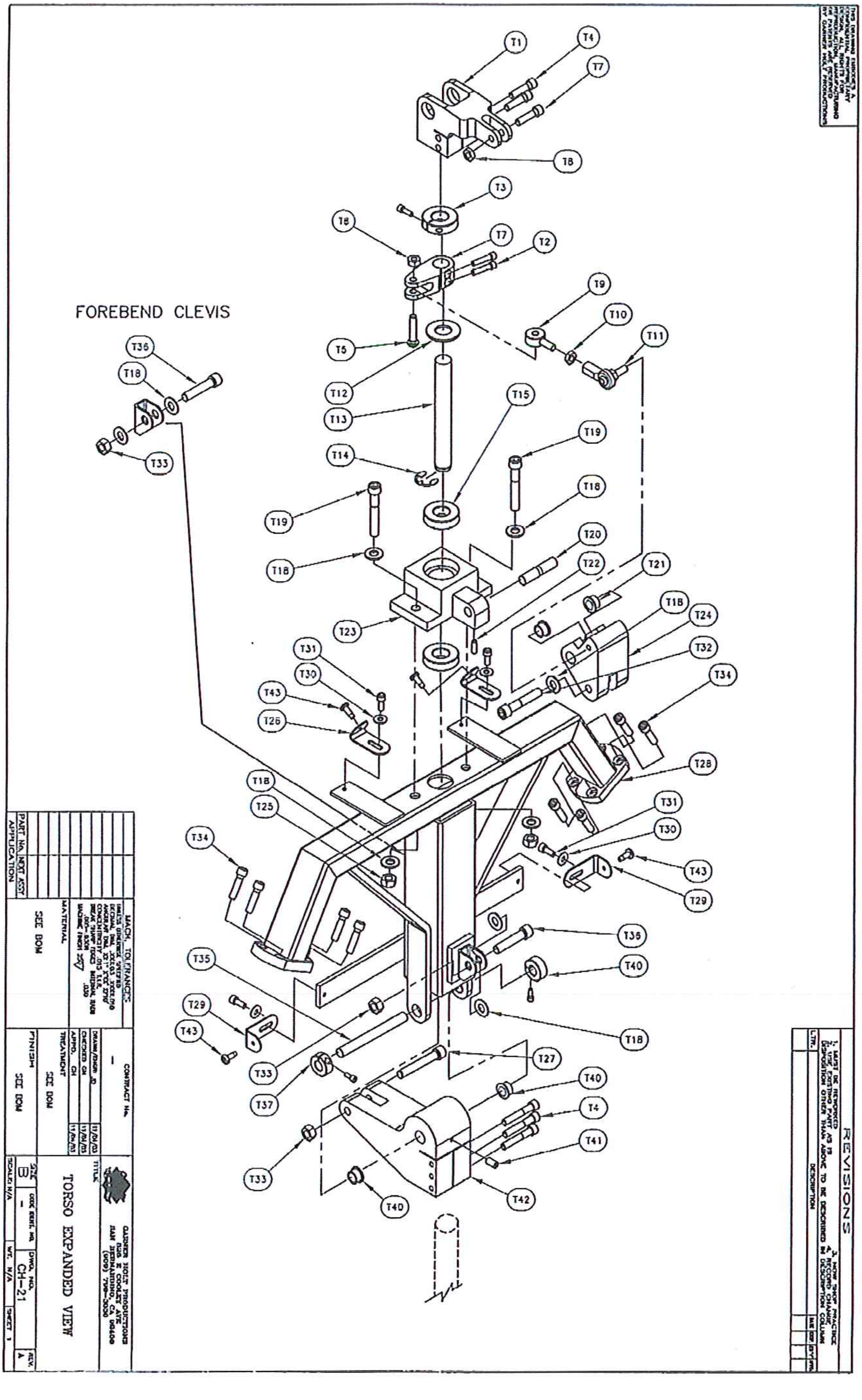
NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
H-31	Eye Blink Lever	1	MP 876	STC-0486	
H-32	Eye Assy. Plate	1		STC-0798	
H-33	Eye Blink and Turn Clevis Block	2	MP 875	STC-0485	
H-34	Eye Plate	2	MP 877	STC-0487	
H-35	Eye Blink Clevis Arm	4	MP 873	STC-0483	
H-36	Eyelid Plate	2	MP 874	STC-0484	
H-37	Eyeblink Pivot Pin	1		STC-0799	
H-38	Socket Head Cap Screw	4	6-32 x 1/2"	STC-0910	
H-39	Eye Turn Pivot Pin	2	MP 887	STC-0497	
H-40	Socket Head Cap Screw	8	10-24 x 5/8"	STC-0917	
H-41	Short Eye Turn Lever	1	MP 872	STC-0482	
H-42	Long Eye Turn Lever	1	MP 871	STC-0481	
H-43	Eye Turn Linkage Threaded Rod	1	6-32x3 3/4"	STC-0800	
H-44	Eye Turn Igus Bushing	4	PP 447	STC-0429	
H-45	Rod End	2	PP 100	STC-0459	
H-46	Socket Head Cap Screw	4	5-40 x 1"	STC-0801	
H-47	Eyelid Shell	2		STC-0367	
H-48	Button Head Cap Screw	16	4-40 x 3/16"	STC-0875	
H-49	Eyeball Shell	2		STC-0366	
H-50	Socket Head Cap Screw	2	8-32 x 1/2"	STC-0913	
H-51	Socket Head Cap Screw	1	1/4-20 x 1"	STC-0929	
H-52	Spacer	2	1/4"	STC-0802	
H-53	Spacer	1	1/2"	STC-0803	
H-54	Rod End	2	PP 101	STC-0460	
H-55	Jam Nut	4	6-32	STC-0895	
H-56	Nylon Locknut	3	5-40	STC-0894	
H-57	Bushing	2	PP 456	STC-0433	
H-58	Truss Phil Machine Screw	3	10-32 x 1/2"	STC-0885	
H-59	Socket Head Cap Screw	2	1/4-28 x 1"	STC-0804	
H-60	Nylon Locknut	2	1/4-28	STC-0903	

CHUCK E. CHEESE
HEAD
PARTS LIST

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CLIENT Chuck E. Cheese Entertainment
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NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
H-61	Rod End	4	PP 107	STC-0463	
H-62	Rod End	2	PP 103	STC-0461	
H-63	Jam Nut	2	10-32	STC-0900	
H-64	Socket Head Cap Screw	1	10-32 x 1"	STC-0924	
H-65	Socket Head Cap Screw	1	10-32 x 1 1/4"	STC-0921	
H-66	Nylon Locknut	2	10-32	STC-0901	
H-67	Jam Nut	4	1/4-28	STC-0903	


FOREBEND CLEVIS
T1
T2
T3
T4
T5
T7
T8
T9
T10
T11
T12
T13
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CH-21

CHUCK E. CHEESE
TORSO
PARTS LIST

DEPT: ANI
DATE: 03/03
SEC:

CLIENT Chuck E. Cheese Entertainment
GATE
SCENE
PROJECT
SHOW
LOCATION

NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
T-1	Head Nod Clamp Block	1		STC-0805	
T-2	Socket Head Cap Screw	2	10-24 x 5/8"	STC-0917	
T-3	1 pc. Clamp Shaft Collar	1		STC-0806	
T-4	Socket Head Cap Screw	5	1/4-20 x 1 1/4"	STC-0807	
T-5	Button Head Cap Screw	1	1/4-28 x 1"	STC-0808	
T-6	Head Turn Clamp Lever	1		STC-0809	
T-7	Socket Head Cap Screw	1	1/4-28 x 1"	STC-0810	
T-8	Nylon Thin Locknut	2	1/4-28	STC-0904	
T-9	Male Rod End	1	PP 107	STC-0463	
T-10	Jam Nut	1	1/4-28	STC-0903	
T-11	Female Stud Rod End	1		STC-0811	
T-12	Shaft Spacer	1		STC-0812	
T-13	Head Turn Shaft	1		STC-0813	
T-14	E Ring	1		STC-0814	
T-15	Head Turn Shaft Bearing	2	PP 406	STC-0476	
T-16	Head Turn Cylinder	1		STC-0695	
T-17	Body Forward Cylinder	1		STC-0815	
T-18	NAS Washer	9	5/16	STC-0642	
T-19	Socket Head Cap Screw	2	5/16-24 x 2"	STC-0816	
T-20	Bell Crank Pivot Pin	1	MP 351	STC-0474	
T-21	Bell Crank Bushing	2	PP 456	STC-0433	
T-22	Set Screw	1	10-24 x 5/16"	STC-0817	
T-23	Head Turn Bearing Block	1		STC-0818	
T-24	Bell Crank Block	1		STC-0819	
T-25	Nylon Thin Locknut	2	5/16-24	STC-0633	
T-26	Upper Body Shell Angle Bracket	2		STC-0407	
T-27	Hex Head Cap Screw	1	5/16-24 x 2 1/4"	STC-0820	
T-28	Torso Weldment	1		STC-0821	
T-29	Lower Body Shell Angle Bracket	2		STC-0407	
T-30	Washer	4	#10	STC-0775	

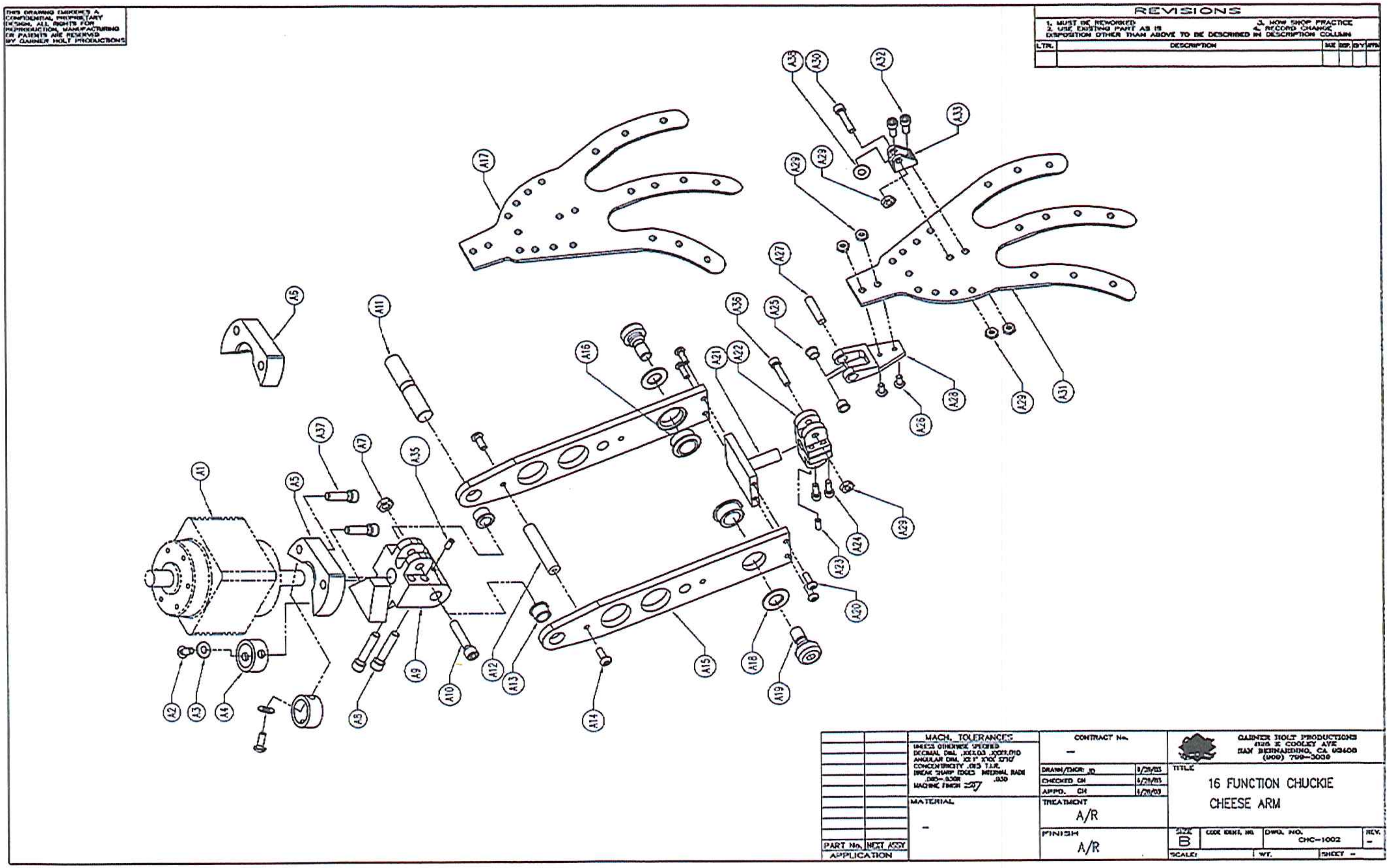
CHUCK E. CHEESE
TORSO
PARTS LIST

DEPT: ANI
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PAGE: 2 of 2

CLIENT Chuck E. Cheese Entertainment
GATE
SCENE

PROJECT
SHOW
LOCATION

NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
T-31	Socket Head Cap Screw	4	10-32 x 1/2"	STC-0886	
T-32	Socket Head Cap Screw	1	5/16-18 x 1 3/4"	STC-0867	
T-33	Nylon Locknut	3	5/16-24	STC-0632	
T-34	Socket Head Cap Screw	8	6mm x 14mm	STC-0873	
T-35	Forebend Clevis Shaft	1		STC-0822	
T-36	Socket Head Cap Screw	2	5/16-24 x 1 1/4"	STC-0870	
T-37	Shaft Collar	2	PP 503	STC-0439	
T-38					
T-39	Rod End	4	PP 109	STC-0464	
T-40	Forebend & Head Nod Bushing	2	PP 458	STC-0434	
T-41	Set Screw	1	1/4-20 x 1/2"	STC-0926	
T-42	Forebend Clevis Block	1		STC-0823	
T-43	Truss Phil Machine Screw	4	10-32 x 1/2"	STC-0885	


REVISIONS
1. MUST BE REWORKED
2. USE EXISTING PART AS IS
3. NOW SHOP PRACTICE
4. RECORD CHANGE
DISPOSITION OTHER THAN ABOVE TO BE DESCRIBED IN DESCRIPTION COLUMN
LTR.
DESCRIPTION
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
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A24
A25
A26
A27
A28
A29
A30
A31
A32
A33
A35
A36
A37
MACH. TOLERANCES
MATERIAL
-
CONTRACT No.
-
DRAWN/ENGR. JD
CHECKED CH
APPD. CH
TREATMENT
A/R
FINISH
A/R
PART No.
NEXT ASSY
APPLICATION
GARNER HOLT PRODUCTIONS
SAN BERNARDINO, CA
TITLE
16 FUNCTION CHUCKIE
CHEESE ARM
SIZE
B
CODE IDENT. NO.
DWG. NO.
CHC-1002
REV.
-
SCALE:
WT.
SHEET -

CHUCK E. CHEESE
ARM
PARTS LIST

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CLIENT Chuck E. Cheese Entertainment
GATE
SCENE

PROJECT
SHOW
LOCATION

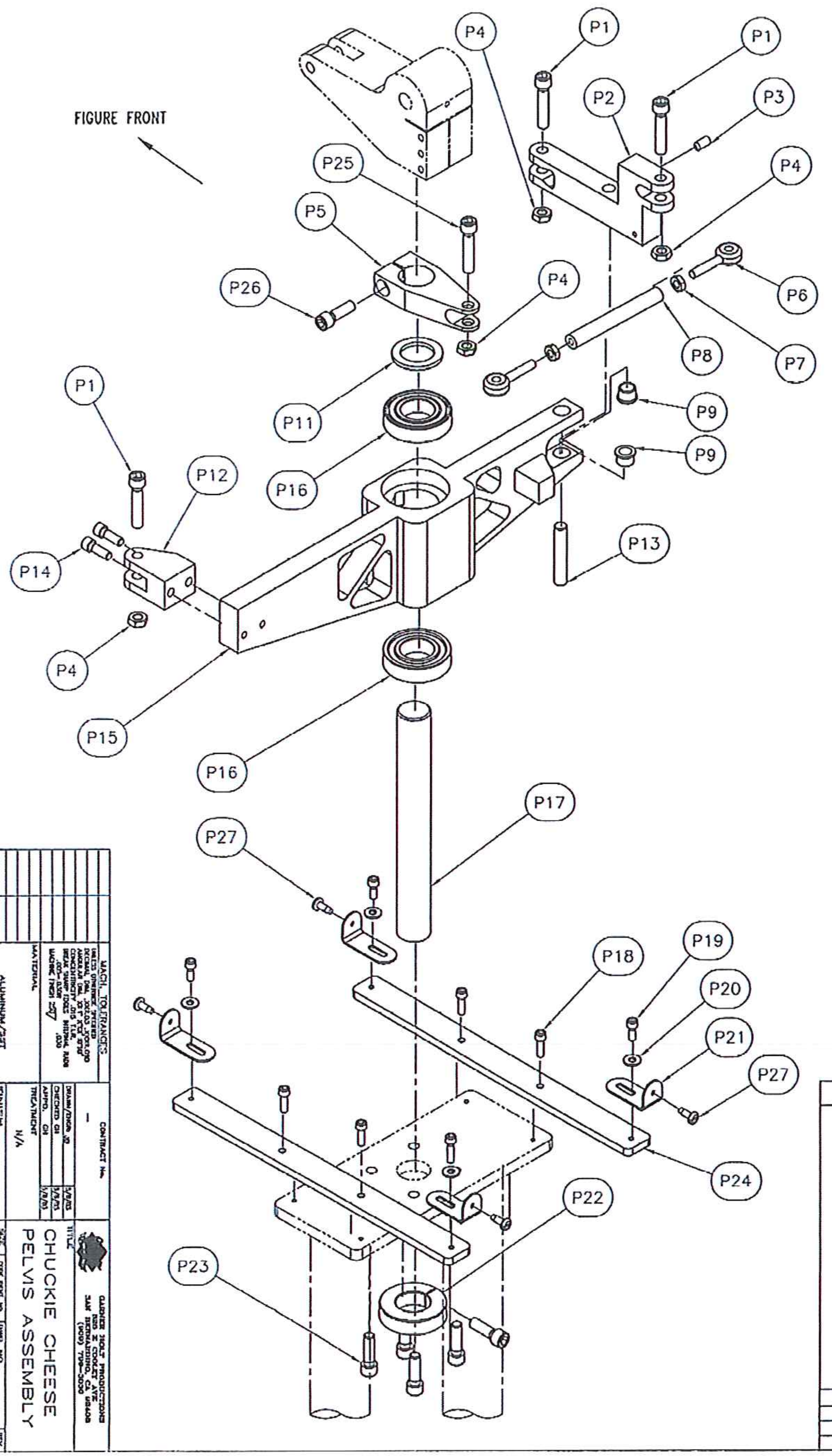
NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
A-1	Arm Swing Cylinder	1	CY 52	STC-0380	
A-2	Buttonhead Allen Cap Screw	2	10-24 x 1/2"	STC-0916	
A-3	Washer	2	#10	STC-0775	
A-4	Arm Swing Bumper	2	PP 203	STC-0468	
A-5	Right Arm Swing Bumper Block	1	MP 834 R	STC-0545	
A-6	Left Arm Swing Bumper Block	1	MP 834 L	STC-0545	
A-7	Nylon Locknut	1	1/4-28	STC-0629	
A-8	Socket Head Cap Screw	2	1/4-20 x 1"	STC-0824	
A-9	Elbow Pivot Block	1	MP 816	STC-0577	
A-10	Socket Head Cap Screw	1	1/4-28 x 1 1/4"	STC-0861	
A-11	Elbow Pivot Pin	1	MP 831	STC-0542	
A-12	Arm Plate Spacer	1	MP 836	STC-0547	
A-13	Elbow Pivot Bushing	2	PP 455	STC-0432	
A-14	Buttonhead Allen Cap Screw	2	10-24 x 5/8"	STC-0917	
A-15	Lower Arm Plate	2		STC-0828	
A-16	Elbow Cylinder Trunnion Bushing	2		STC-0431	
A-17	Left Hand Plate	1		STC-0532	
A-18	Elbow Cyl. Trun. Bushing Washer	2		STC-0825	
A-19	Elbow Cyl. Trunnion Shoulder Bolt	2		STC-0826	
A-20	Buttonhead Allen Cap Screw	4	8-32 x 5/8"	STC-0914	
A-21	Arm Plate Spacer / Wrist Post	1		STC-0827	
A-22	Wrist Wave Pivot Block	1	MP 820	STC-0531	
A-23	Set Screw	1	6-32 x 1/4"	STC-0648	
A-24	Socket Head Cap Screw	2	8-32 x 1/2"	STC-0913	
A-25	Wrist Wave Clevis Bushing	2	PP 450	STC-0430	
A-26	Buttonhead Allen Cap Screw	2	10-32 x 1/2"	STC-0885	
A-27	Wrist Wave Clevis Pin	1	MP 852	STC-0513	
A-28	Wrist Wave Clevis	1	MP 533	STC-0590	
A-29	Nylon Thin Locknut	6	10-32	STC-0900	
A-30	Socket Head Cap Screw	1	10-32 x 3/4"	STC-0923	

CHUCK E. CHEESE
ARM
PARTS LIST

DEPT: ANI
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CLIENT Chuck E. Cheese Entertainment
GATE
SCENE
PROJECT
SHOW
LOCATION

NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
A-31	Right Hand Plate	1		STC-0532	
A-32	Socket Head Cap Screw	2	10-32 x 1/2"	STC-0885	
A-33	Wrist Wave Cylinder Clevis	1	PP 302	STC-0471	
A-34	Elbow Up Cylinder	1		STC-0693	
A-35	Set Screw	1	10-24 x 5/16"	STC-0829	
A-36	Socket Head Cap Screw	1	10-32 x 1"	STC-0924	
A-37	Button Head Allen Cap Screw	2	6mm X 15mm	STC-0830	
A-38	NAS Washer	1	#10	STC-0775	
A-39	Wave Cylinder	1		STC-0831	



REVISIONS

1. MUST BE REWORKED 3. NOW SHOP PRACTICE
2. USE EXISTING PART AS IS 4. RECORD CHANGE
DISPOSITION OTHER THAN ABOVE TO BE DESCRIBED IN DESCRIPTION COLUMN

LTR.	DESCRIPTION	DATE			

PART No. / NEXT ASSY / APPLICATION	MACH. TOLERANCES / MATERIAL: ALUMINUM/2ST	CONTRACT No. –
	DRAWN/DSGN. JD 3/8/03 · CHECKED CH 3/8/03 · APPD. CH 3/8/03	TREATMENT N/A · FINISH N/A

GARNER HOLT PRODUCTIONS
SAN BERNARDINO, CA
(909) 799-3030

TITLE: CHUCKIE CHEESE PELVIS ASSEMBLY

SIZE: B | CODE IDENT. NO. – | DWG. NO. CC-0023 | REV. A
SCALE: NTS | WT. – | SHEET 1/1

CHUCK E. CHEESE PELVIS ASSEMBLY PARTS LIST

DEPT: ANI
DATE: 03/03
SEC:

CLIENT Chuck E. Cheese Entertainment
GATE
SCENE
PROJECT
SHOW
LOCATION

NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
P-1	Socket Head Cap Screw	3	5/16-24 x 1 1/2"	STC-0871	
P-2	Torso Twist Lever	1	MP 803	STC-0564	
P-3	Set Screw	1	10-24 x 1/4"	STC-0832	
P-4	Nylon Locknut	4	5/16-24	STC-0632	
P-5	Clamping Lever	1	MP 936	STC-0453	
P-6	Male Rod End	2	PP 109	STC-0464	
P-7	Jam Nut	2	5/16-24	STC-0631	
P-8	Connecting Rod	1	MP 842	STC-0503	
P-9	Bushing	2	PP 456	STC-0433	
P-10	Torso Twist Cylinder	1		STC-0833	
P-11	Shaft Spacer	1	MP 856	STC-0516	
P-12	Cylinder Clevis	1	MP 881	STC-0491	
P-13	Pin	1	MP 351	STC-0474	
P-14	Socket Head Cap Screw	2	1/4-20 x 3/4"	STC-0928	
P-15	Pelvis Block	1		STC-0834	
P-16	Bearing	2	PP 410	STC-0477	
P-17	Shaft	1	MP 853	STC-0514	
P-18	Socket Head Cap Screw	4	10-32 x 1/2"	STC-0886	
P-19	Socket Head Cap Screw	4	10-24 x 1/2"	STC-0916	
P-20	Washer	4	#10	STC-0775	
P-21	Angle Body Shell Clip	4		STC-0407	
P-22	Shaft Collar	1	PP 507	STC-0568	
P-23	Socket Head Cap Screw	4	5/16-18 x 1"	STC-0864	
P-24	Body Shell Mount Plate	2	MP 838	STC-0549	
P-25	Socket Head Cap Screw	1	5/16-24 x 1 1/4"	STC-0870	
P-26	Socket Head Cap Screw	1	5/16-18 x 1 1/4"	STC-0835	
P-27	Truss Phil Machine Screw	4	10-32 x 1/2"	STC-0885	
P-28					
P-29					
P-30					

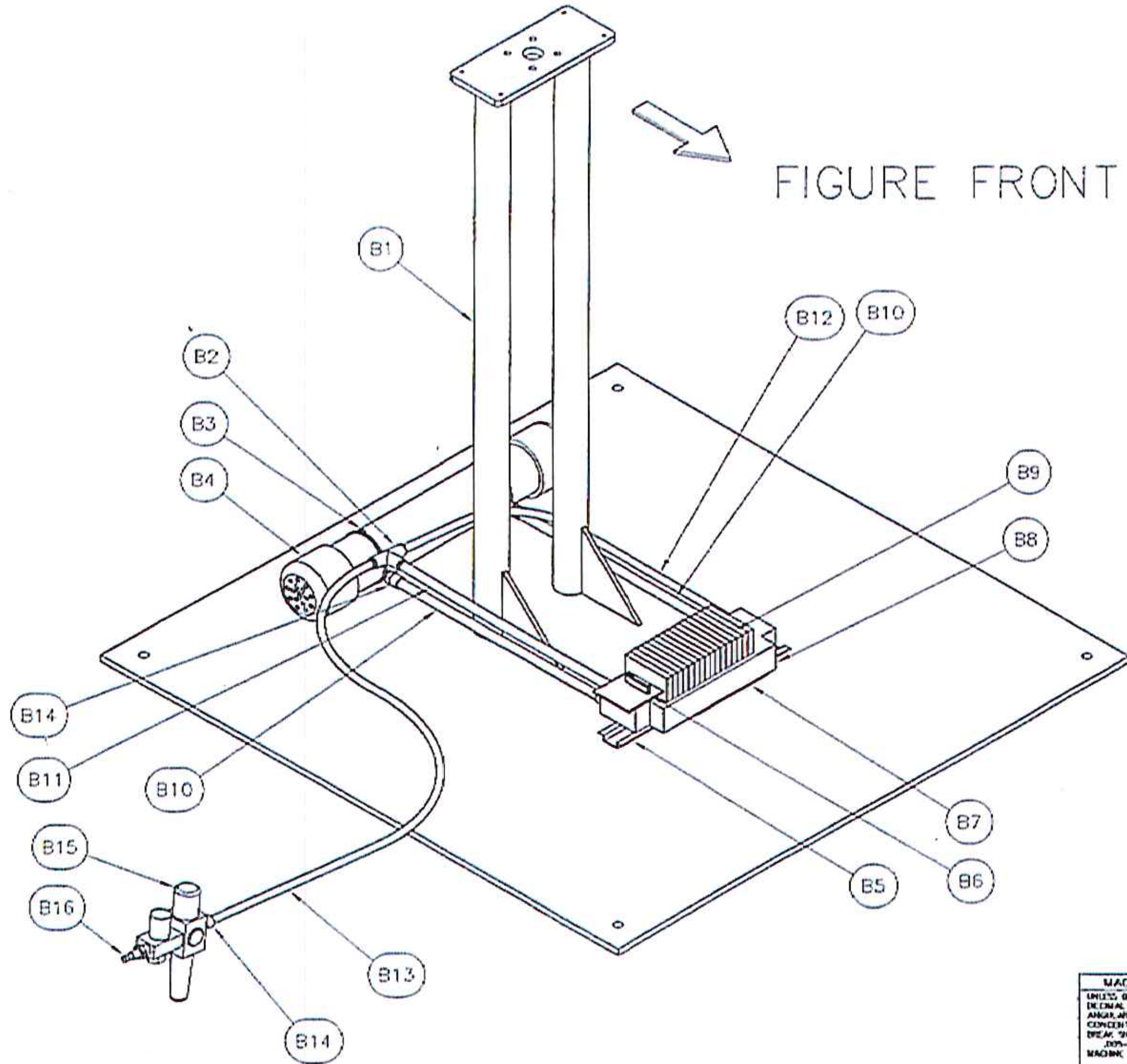
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REVISIONS

1. MUST BE REWORKED
2. USE EXISTING PART AS IS
3. NOW SHOP PRACTICE
4. RECORD CHANGE

DISPOSITION OTHER THAN ABOVE TO BE DESCRIBED IN DESCRIPTION COLUMN

LTR.	DESCRIPTION				



MACH. TOLERANCES	CONTRACT No.	GARNER HOLT PRODUCTIONS, 825 E. COOLEY AVE., SAN BERNARDINO, CA 92408, (909) 799-3030
UNLESS OTHERWISE SPECIFIED; MACHINE FINISH	—	TITLE: ASSY, BASE AND VALVES
MATERIAL: N/A	TREATMENT: N/A	SIZE: B; DWG. NO.: CC-1010; REV: A
	FINISH: N/A	SCALE: NTS; WT. –; SHEET 1

CHUCK E. CHEESE
BASE & VALVES ASSY.
PARTS LIST

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CLIENT Chuck E. Cheese Entertainment
GATE
SCENE
PROJECT
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LOCATION

NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
B-1	Base / Legs Weldment	1		STC-0836	
B-2	3/8" "T" Tube Fitting	1		630-0040-01	
B-3	Wire Tie / Adhesive Pad	2		RCB-0001	
B-4	Exhuast Muffler	1		STC-0837	
B-5	Din Rail	1		STC-0838	
B-6	Connector Interface Card	1		STC-0839	
B-7	Velcro Mount Strips	2		STC-0840	
B-8	Valve Manifold Assembly	1		STC-0841	
B-9	Valve	16		STC-0842	
B-10	5/16" Exhaust Tube	2		STC-0843	
B-11	5/16" Air Feed Tube / Short	1		STC-0844	
B-12	5/16" Air Feed Tube / Long	1		STC-0845	
B-13	5/16" Regulator Tube	1		STC-0846	
B-14	5/16" Straight Tube Fitting	2		STC-0847	
B-15	Valve / Filter / Regulator	1	Includes gauge	STC-0473	
B-16	Q.C. Fitting	1		STC-0848	
B-17					
B-18					
B-19					
B-20					
B-21					
B-22					
B-23					
B-24					
B-25					
B-26					
B-27					
B-28					
B-29					
B-30					

CHUCK E. CHEESE ACTUATOR AND PARTS LIST

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CLIENT Chuck E. Cheese Entertainment
GATE
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NO.	ITEM	QTY.	DESCRIPTION	PART #	NOTES
ACT-1	Arm Swing Right Actuator	1	RFKSS-IAH0008	STC-0380	
ACT-2	Elbow Up Right Actuator	1	RFKSS-IAH0010	STC-0693	
ACT-3	Wave Right Actuator	1	US21381	STC-0831	
ACT-4	Arm Swing Left Actuator	1	RFKSS-IAH0008	STC-0380	
ACT-5	Elbow Up Left Actuator	1	RFKSS-IAH0010	STC-0693	
ACT-6	Wave Left Actuator	1	US21381	STC-0831	
ACT-7	Body Forward Actuator	1	US21380	STC-0815	
ACT-8	Torso Twist Right and	X		STC-0833	
ACT-9	Torso Twist Left Actuator	1	US15388	STC-0833	
ACT-10	Head Turn Left and	X		STC-0695	
ACT-11	Head Turn Right Actuator	1	US21663	STC-0695	
ACT-12	Head Up Actuator	1	US21382	STC-0790	
ACT-13	Mouth Actuator	1	US15381	STC-0791	
ACT-14	Eye Blink Down Actuator	1	US21381	STC-0792	
ACT-15	Eye Turn Left and	X		STC-0793	
ACT-16	Eye Turn Right Actuator	1	US15389	STC-0793	
OR-BL	Blue Orifice	10	F-2815-201 B80	STC-0938	
OR-GR	Gray Orifice	10	F-2815-161 B80	STC-0939	
OR-BR	Brown Orifice	10	F-2815-251 B80	STC-0940	
OR-BK	Black Orifice	10	F-2815-121 B80	STC-0941	
RE-1	Rod End (MW5)	2	Torso Twist L/R	STC-0465	
RE-2	Rod End (MM5)	4	Bdy Frwd., Hd Turn L/R	STC-0464	
RE-3	Rod End (MM4)	6	Elbow L/R, Head Up, Mouth	STC-0694	
RE-4	Rod End (MM3)	6	Wave L/R, Eyeblink Down	STC-0461	
RE-5	Rod End (MM2)	2	Eyeturn L/R	STC-0460	

NOTE: 1. All actuators are sold without rod ends.
2. All actuators include hose fittings.

CHUCK E. CHEESE ACTUATOR AND PARTS LIST

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CLIENT: Chuck E. Cheese Entertainment
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NO.	ITEM	QTY.	DESCRIPTION	PRICE	NOTES
HS-YEL	Yellow Hose	100'	TIUB01Y1	STC-0934Y	
HS-ORG	Orange Hose	100'	TIUB01YR	STC-0934O	
HS-WHT	White Hose	100'	TIUB01W	STC-0934W	
HS-BLK	Black Hose	100'	TIUB01B	STC-0934B	
HS-RED	Red Hose	100'	TIUB01R1	STC-0934R	
HS-CLR	Clear Hose	100'	TIUB01C	STC-0934C	
HS-GRY	Grey Hose	100'	TIUB01GR1	STC-0934GR	
HS-BRN	Brown Hose	100'	TIUB01BR1	STC-0934BR	
HS-GRN	Green Hose	100'	TIUB01G1	STC-0934G	
HS-BLU	Blue Hose	100'	TIUB01BU1	STC-0934BL	

NOTE: 1. All actuators are sold without rod ends.
2. All actuators include hose fittings.